



Vaccine communication

A view from 'down under'

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The University
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Main points

- n This talk:
 - .. Improving parent-provider vaccine risk communication
 - 1. Providers are central
 - 2. People are not blank slates
 - 3. Interactive methods can support communication



Australian context

Population 21,559,588

Highly urbanised

Australian context

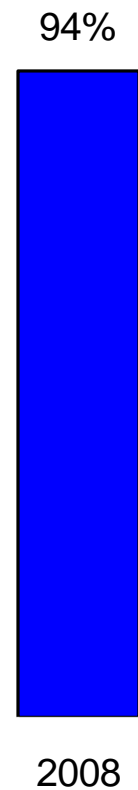
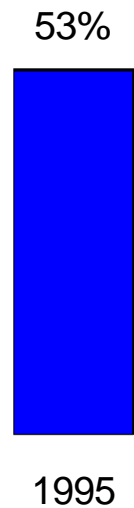
Australian child vaccination rates

How?

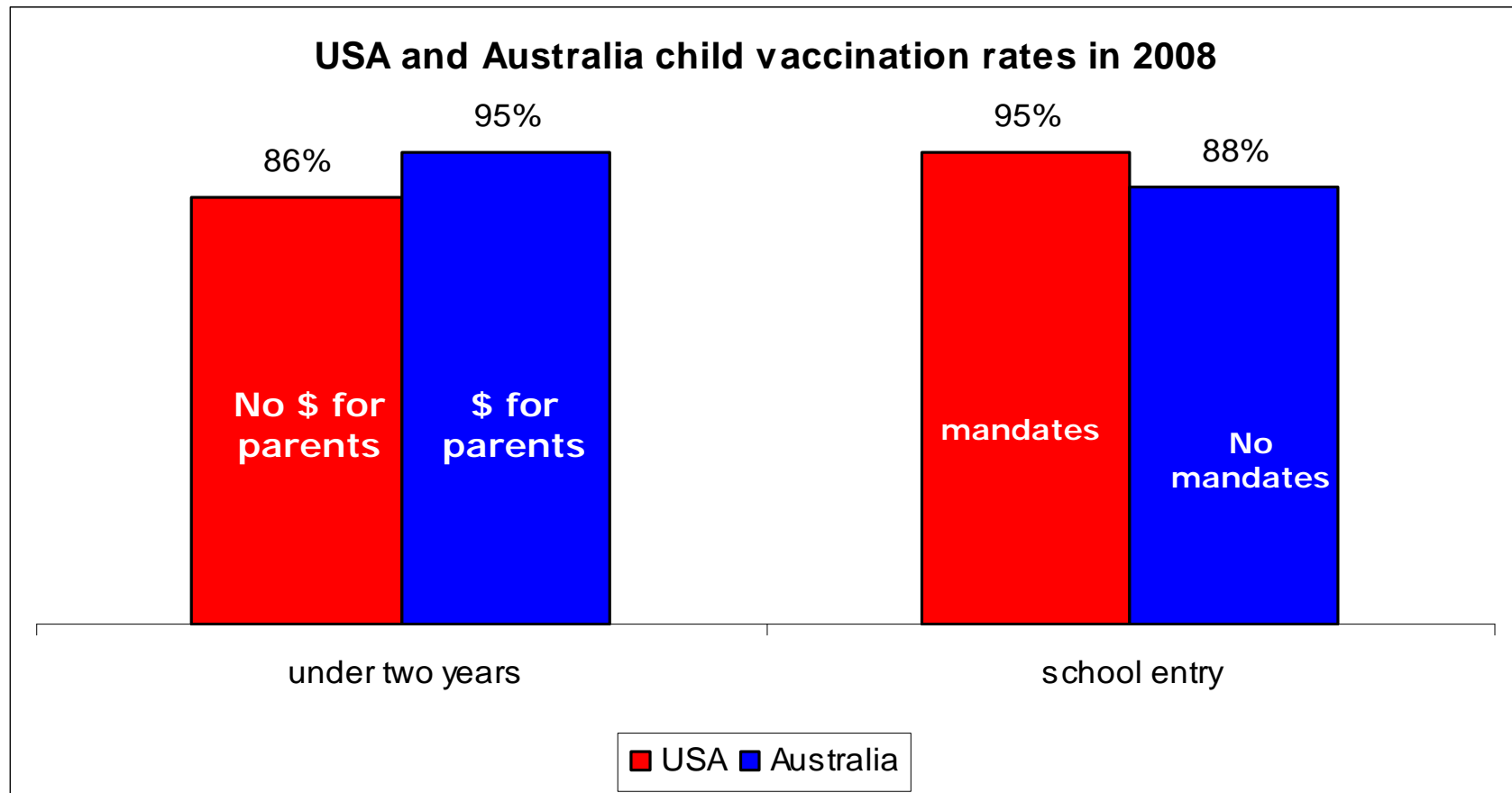
- è \$ parents
- è \$ doctors
- è school entry requirements
- è national register (ACIR)
to monitor targets
- è campaigns

But

- è less public engagement

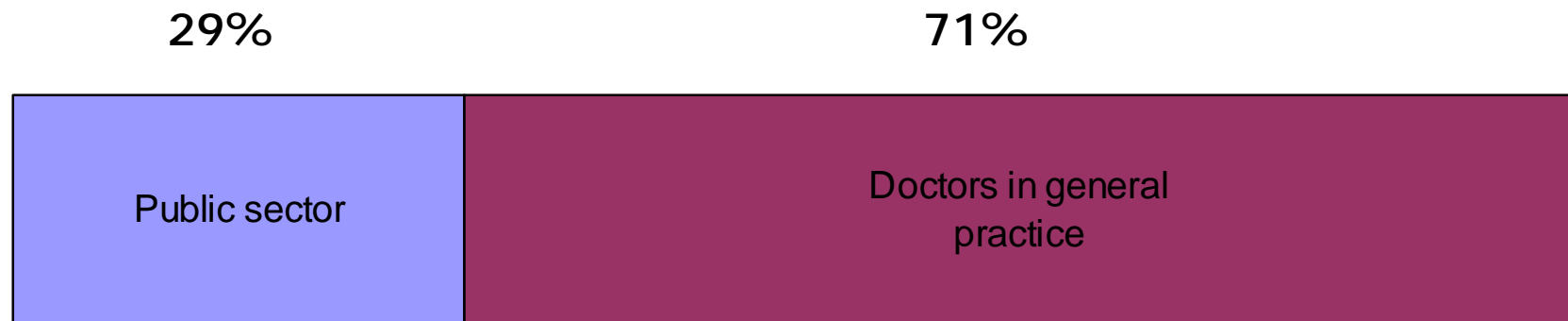


Australian context



Australian health professionals

Australian Immunisation program for children under 5 years: provider type



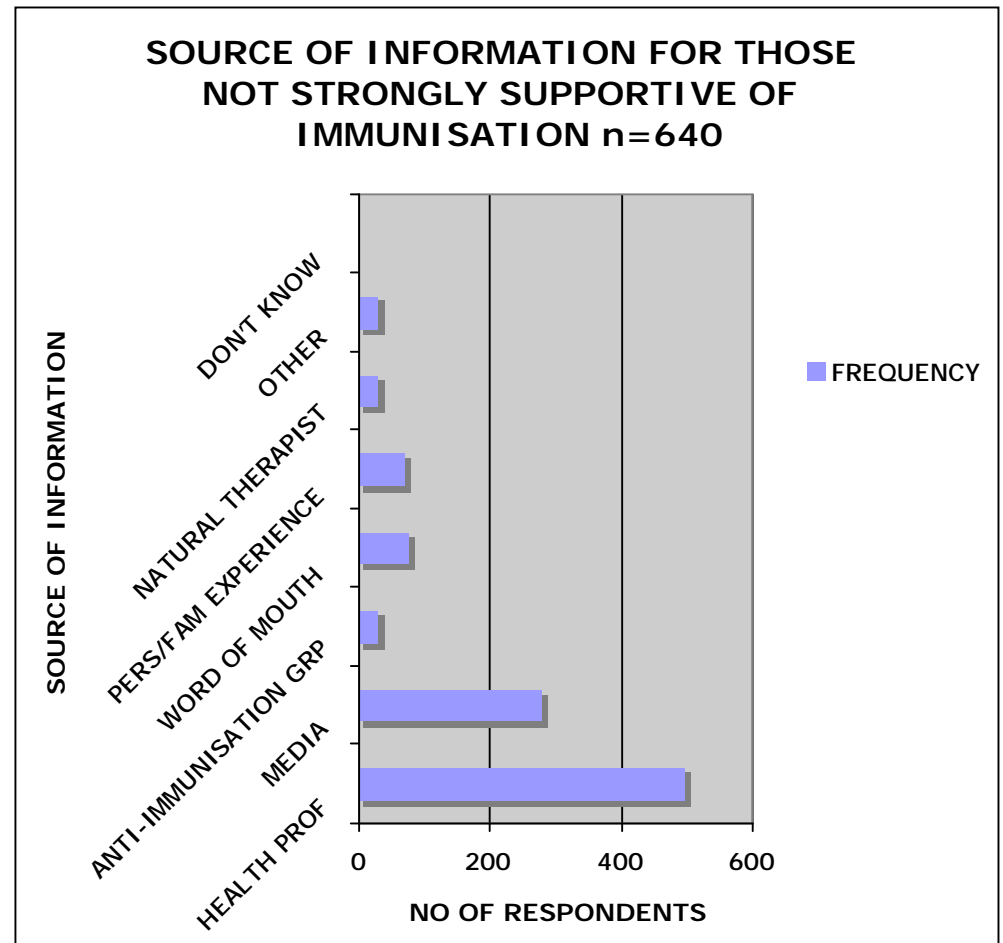
Health professionals

- n Health professionals are trusted
- n Numerous studies
 - .. USA¹⁻⁴
 - .. UK⁵⁻⁷
 - .. Australia⁸⁻¹⁰

¹Daley 2006, ²Nowalk 2006, ³Lin 2006, ⁴Gellin 2000

⁵Sporton 2001, ⁶Pareek 2000, ⁷Peckham 1989

⁸Bond 1998, ⁹Blair 2003, ¹⁰Leask 2006



Catherine Meller 2005, NSW Child Health Survey



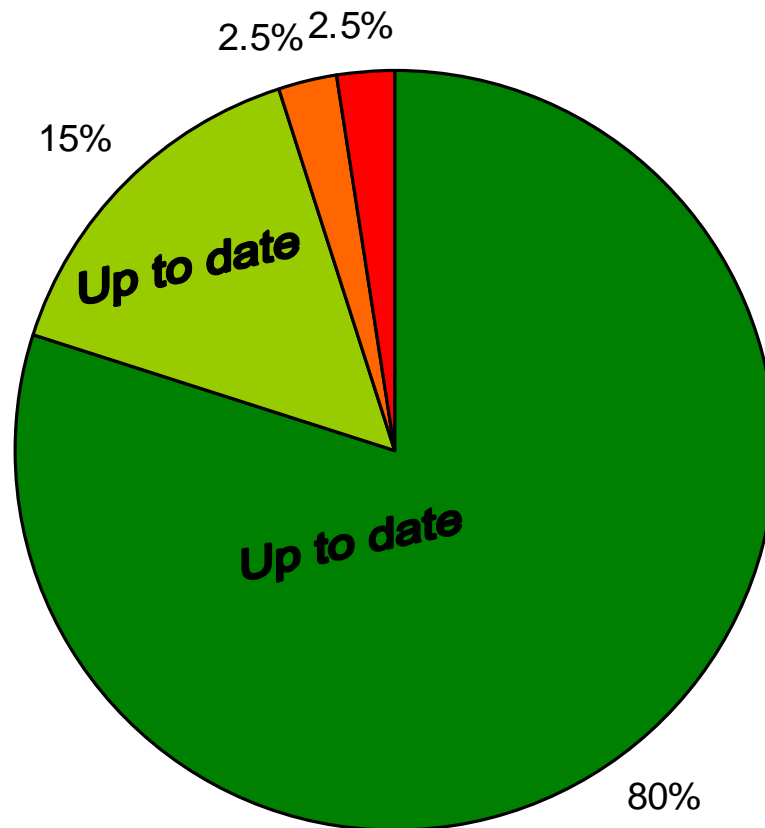


Health professionals

- What are the goals?
- What goals do health professionals embrace?
- With whom are providers communicating?



Australian parents of two year old children:
four major attitudes/behaviours (figures are approximate)



- Just do it
- Questioners
- Practical barriers
- Conscious decision

Data sources:
Hull B, Lawrence G, MacIntyre CR, McIntyre P 2002
Gust et al 2006

Parents

- n Conscious decision
- n Questioners
 - .. college education
 - .. older mothers
 - .. wealthier



The Immunisation Maze ABC Radio National
10 July 2007

<http://www.abc.net.au/rn/lifematters/stories/2007/1972255.htm>



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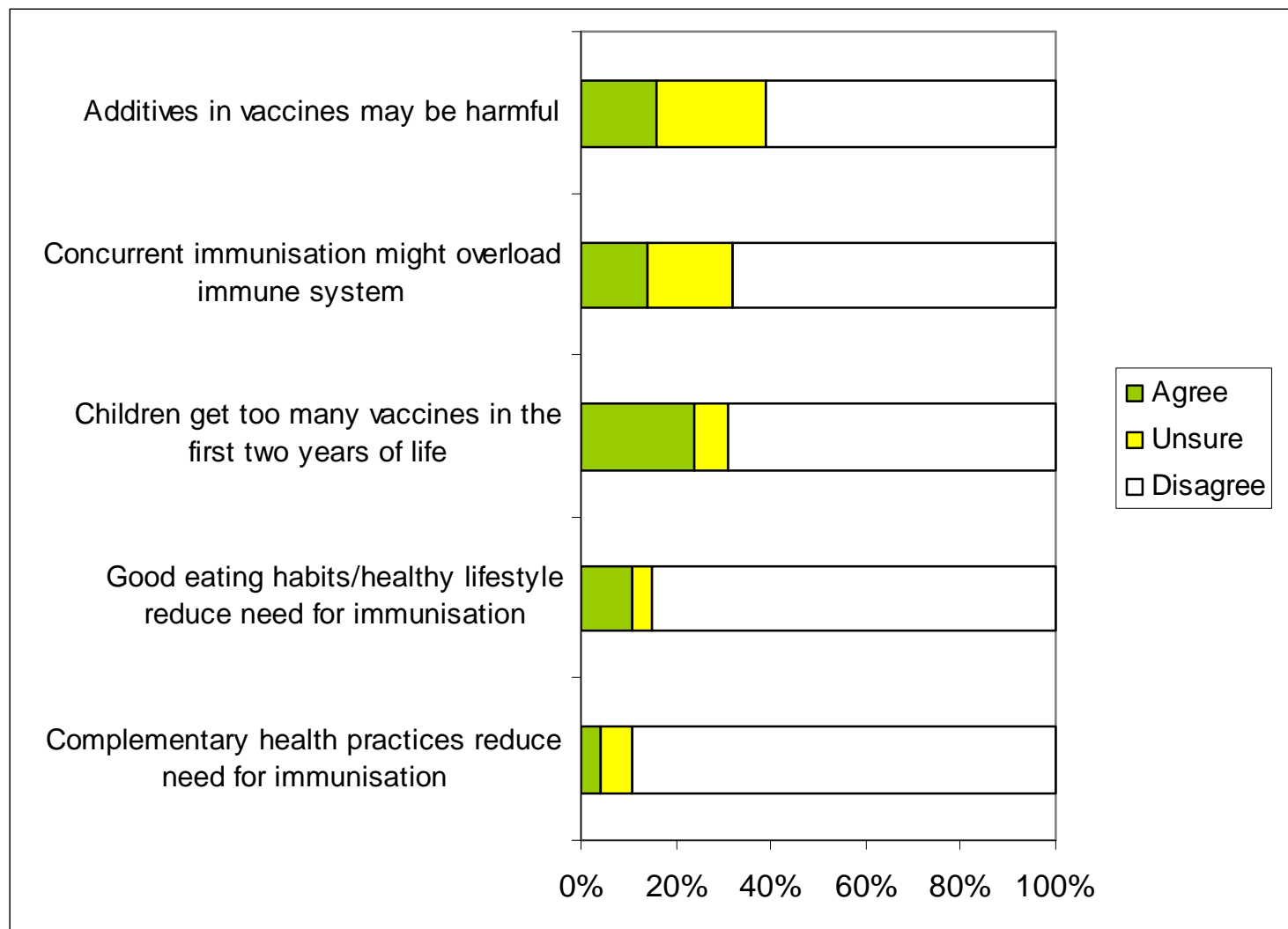
Parents

Top 3 vaccine concerns

- n Do vaccines cause autism?
- n Do vaccines overload the immune system?
- n Are children getting too many vaccines?



Health professionals' concerns



Leask J, Quinn HE, Macartney K, et al. Immunisation attitudes, knowledge and practices of health professionals in regional NSW. *Aust N Z J Public Health* 2008;32:224-9.



Parent-provider communication

Leask J, How do doctors persuade parents to vaccinate their children? An interview study using standardised scenarios. Submitted to NSW Pub Health Bulletin 2008.

- n Four concerned parent scenarios presented to doctors
 - .. Passing concerns
 - .. Considering a delay
 - .. On the fence
 - .. Refusal
- n Qualitative analysis



Parent-provider communication

Communication strategies

- n Acknowledge concerns
- n Discredit information source
- n Refusers
 - .. scientific 'ping pong'
 - .. social obligation
- n Risk communication
 - .. estimates mostly qualitative
 - .. loss frame
 - .. written information offered

Suggestions

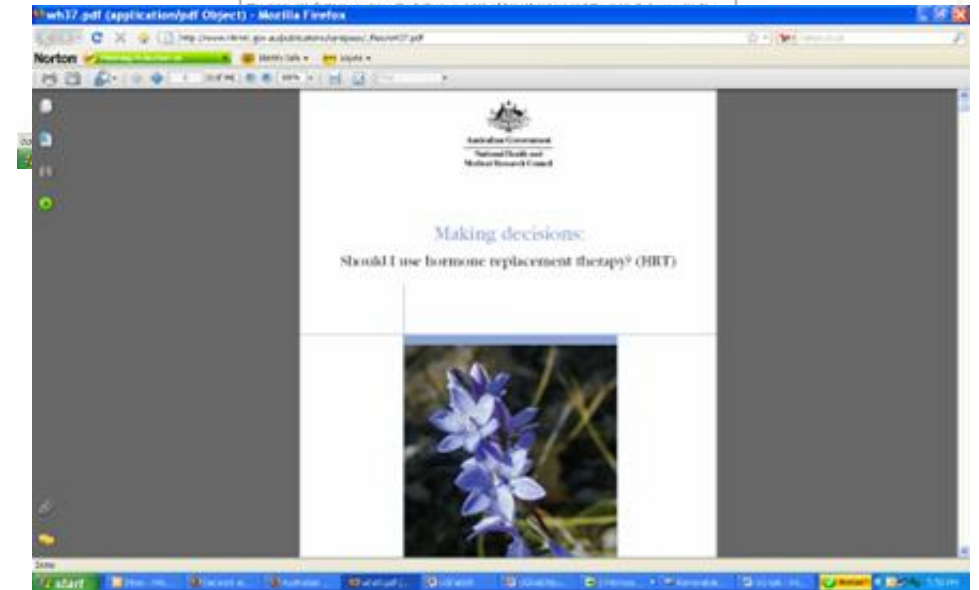
- n Establish where they are at
- n Suggest alternative information sources
- n Help understand impact of choice on others in neutral terms
- n Respect vaccine choices
- n Use words and numbers
- n Consider gain frame
- n Use supplementary information



Communication

Decision support tools

- .. help people understand
 - n their options
 - n potential outcomes
 - n value placed on outcomes
 - n benefits and harms



Research

Downloaded from bmj.com on 29 January 2009

BMJ

Effects of a web based decision aid on parental attitudes to MMR vaccination: a before and after study

Cate Wallace, Julie Leask, Lyndal J Trevena

The MMR Decision Aid

The National Centre for Immunisation Research and Surveillance, Australia

How to compare the risks

What are the potential risks of Measles compared with the potential risks of MMR?

What are the potential risks in a group of 100 children and adolescents who get measles?

- 8 may get diarrhoea¹
- 7 may get an ear infection¹
- 8 may get pneumonia¹
- 1 may be hospitalised¹
- The remaining 92 children may experience symptoms such as fever, rash, runny nose, loss of appetite, and red and painful eyes¹

• 333 out of 1 million children reported to have measles may die as a result²

What are the potential risks in a group of 100 children who have the MMR vaccination?

- 10 may experience local inflammation at the injection site, (swelling or fever)³
- 8 may develop swollen glands or joint pain³
- 3 may develop a non-infectious faint red rash³
- 1 may develop swelling of the salivary glands³
- 83 may not have any side-effects³

• 33 out of 1 million children may develop a temporary tendency for bruising or bleeding³

- ▶ INTRODUCTION
- ▶ HOW TO USE THIS SITE
- ▶ FREQUENTLY ASKED QUESTIONS
- ▶ HOW TO COMPARE THE RISKS
- ▶ WHAT ARE MY OPTIONS?
- ▶ MAKING A DECISION
- ▶ USEFUL WEBSITES
- ▶ REFERENCES
- ▶ CONTACT US

The MMR Decision Aid

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Making a decision

First consider some of the reasons **FOR** MMR vaccination

This reason is	Very important to me	Slightly important to me	Not important to me
▶ My child will be better protected from common symptoms of these diseases such as rash, high fever, red and painful eyes, swollen glands and joint pain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
▶ My child will be better protected from the potentially serious complications of these diseases (eg encephalitis or death).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
▶ I will not have to take time off work to care for my child if they get one or more of these diseases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
▶ My child won't face the restrictions imposed by some schools and childcare centres that exclude children who have not been vaccinated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
▶ If there is an outbreak of measles, mumps or rubella my child will be able to keep attending school or childcare.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
▶ My vaccinated child is less likely to pass on diseases to the small number of children who are unable to be vaccinated for medical reasons.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Decision aid findings

- n **Sydney study** (Wallace, Leask, Trevena)
“Leaning towards MMR immunisation”
39% to 55% $p < 0.0001$
- n **Leeds study** (Jackson, Peacock, Cheater)
 - .. Reduced decision conflict
 - .. Improved knowledge
- n **New Zealand study** (Wroe, Turner, Owens)
 - .. Increased intention to vaccinate



Conclusion

1. Communication interventions
2. New frontiers – young adults, older adults, HCW
3. Dialogue not didacticism
4. Timely information for health professionals
5. Cross disciplinary approaches to research and action



Peer led meetings in Leeds. Jackson, Cheater et al 2007





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Thank you